

ABSTRACT

OPTICAL SCANNING DEVICE FOR LIQUID BIOLOGICAL SAMPLES, PROCESS OF OPERATION AND COMPUTER PROGRAM FOR A COMPUTER CONNECTED TO SAID DEVICE

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Optical scanning device (1) for the production of a 2D computer image of a liquid or humid biological sample observed by transparency, wherein an even thickness of the liquid biological sample (30) is disposed in a tank (3) optically enclosed between an illumination assembly (2) and an optical sensing assembly (4), the optical sensing assembly having a moving part able to move in a plane parallel to the sample as to scan an area of the sample of sensibly equal thickness, the illumination assembly having a luminous source sensibly homogeneous at least in the scanned area and including towards the sample, an optical grid filter (25) with a surface parallel to the plane and transmitting only light rays sensibly perpendicular to its surface. the sample can be observed by reflection. The tank is open and joint to the optical sensing assembly. The illumination assembly and the optical sensing assembly can be tilted in relation to preparation, scanning and flushing operational phases. Images are processed according to a program in a connected computer.

FIGURE 1